(a) whether it is a fact that the temperature at sea surface level has increased by 1.5 degree Celsius during the last fifty years and this would cause climatic changes and adversely affect monsoon; and

(b) if so, the reaction of Government in this regard?

THE MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT AND FORESTS (SHRI NAMO NARAIN MEENA): (a) Sea surface temperatures (SST) of most of the oceans have risen in the last fifty years. Available observations show that the temperature rise varies from 0.50°C to 1.0°C for different oceans. Higher SST is likely to enhance the evaporation generally warm the air temperature also. But as the climate processes are very complex, the manner in which future climate shall be driven has large uncertainties, including its effect on monsoon.

(b) The Government of India has formed a "National Action Plan on Climate Change" and under its Strategic Knowledge Mission, several network activities are planned for understanding the gaps in the science of regional scale climate changes. The takes covers a wide spectrum of issues. The Government, through the National Action Plan on Climate Change, proposes to address the overall climate change issue.

Tiger population

†1047. SHRI PRABHAT JHA: Will the PRIME MINISTER be pleased to state:

(a) whether it is a fact that inspite of Government schemes and Prime Minister himself expressing concern, the population of tigers is decreasing continuously;

(b) if so, the details thereof along with the reasons therefor;

(c) the number of tigers dead and those killed by poachers during last five years; and

(d) the schemes running/being run by Government for the security of tigers and the results thereof?

THE MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT AND FORESTS (SHRI S. REGUPATHY): (a) and (b) As per the findings of the recent all India estimation of tiger using the refined methodology, the total country-level population of tiger is 1411 (mid value); the lower and upper limits being 1165 and 1657 respectively. The recent assessment of tiger population is based on determining spatial occupancy of tigers throughout potential tiger forests and sampling such forests using camera traps in a statistical framework. This assessment is not comparable to the earlier total count using pugmarks owing to several shortcomings in the latter. The new findings indicate a poor status of tiger population in areas outside tiger reserves and protected areas. The tiger population, by and large, in tiger reserves and protected areas of such States are viable, while requiring ongoing conservation efforts. The reasons for decline in population of tigers are given in the Statement-I (*See* below).

(c) The details of tiger deaths, including poaching, for the last five years is given in the Statement-II (*See* below).

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†Original notice of the question was received in Hindi.

(d) Project Tiger is an ongoing, focused Centrally Sponsored Scheme of the Ministry of Environment and Forests, providing funding support to 17 tiger range States in the country, for *in-situ* conservation of tiger in the 37 designated tiger reserves. It has put the endangered tiger on an assured path of recovery by saving it from extinction, as revealed by the recent findings of the All India tiger estimation using the refined methodology. This independent report highlights the achievements of Project Tiger by showing that viable tiger population exists only in tiger reserve areas, which are under the jurisdiction of Project Tiger, while the status of outside populations are highly depleted.

Statement-I

Details the reasons for decline in population of tigers

1. Mortality of wild animals due to poaching.
2. Degradation of forest status outside Protected Areas/Tiger Reserves owing to human pressure, livestock pressure, and ecologically unsustainable land uses
3. Fragmentation leading to loss of gene flow from source populations.
4. Mortality of wild animals due to man-animal conflicts.
5. Loss of reproduction owing to disturbance on account of heavily used infrastructure like highways, etc.
6. Lack of adequate protection in outside areas.
7. Loss of forest quality in terms of prey biomass to support large carnivores like tiger and leopard.
8. Insurgency/law and order problems in some tiger reserves/protected areas/forests areas.

Statement-II

Details regarding mortality of tigers (year-wise) as reported by States

Year	Natural (Animals)	Poaching (Animals)	Total (Animals)
2004	17	5	22
2005	13*	4	17
2006	10*	4	14
2007	20*	10	30
2008	10*	4	14
2009 (Till 22.02.2009)	7	2	9

*Includes cases in which Post Mortem report is pending.